

### Year 4 2021- 22 Overview Maths

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		
6 <sup>th</sup> Sep – 12 <sup>th</sup> Sep	13 <sup>th</sup> - 19 <sup>th</sup> Sep	20 <sup>st</sup> -26 <sup>th</sup> Sep	27 <sup>th</sup> – 3 <sup>rd</sup> Oct	4 <sup>th</sup> – 10 <sup>th</sup> Oct	11 <sup>th</sup> - 17 <sup>th</sup> Oct	18 <sup>th</sup> – 24 <sup>th</sup> Oct	26 <sup>th</sup> – 30 <sup>th</sup> Oct	– 1 <sup>st</sup> 7 <sup>th</sup> Nov	8 <sup>th</sup> – 17 <sup>th</sup> Nov	15 <sup>th</sup> – 21 <sup>st</sup> Nov	22 <sup>nd</sup> – 28 <sup>th</sup> Nov	29 <sup>th</sup> – 5 <sup>th</sup> Dec	6 <sup>th</sup> – 12 <sup>th</sup> Dec	13 <sup>th</sup> - 18 <sup>th</sup> Dec		
<p><b>Recap place value in 3-digit numbers initially as appropriate.</b></p> <p><b>Number and Place value</b></p> <ul style="list-style-type: none"> <li>➤ Recognise the place value of each digit in four-digit numbers up to 10,000 (thousands, hundreds, tens, and ones)</li> <li>➤ Identify, represent and estimate numbers using different representations using numbers up to 10,000.</li> <li>➤ Order and compare numbers up to 10,000 using &lt; &gt; =</li> <li>➤ Order and compare numbers up to 10,000 using a number line.</li> <li>➤ Count in multiples of 6, 7, 9 25 and 1000 (<i>In lesson then move to MMM</i>)</li> <li>➤ Solve number and practical problems that involve all of the above with increasingly large positive numbers up to 10,000</li> <li>➤ Recap rounding basics so that this can be added into MMM sessions. E.g. Rounding 2 and 3 digit numbers to the nearest 10 and 100</li> </ul>			<p><b>Number Addition and subtraction</b></p> <ul style="list-style-type: none"> <li>➤ Find 1, 10, 100 and 1000 more or less than a given number under 10,000,</li> <li>➤ Add and subtract numbers with up to 3 digits using the formal written method for addition and subtraction including carrying and exchanging.</li> <li>➤ Add and subtract numbers with 4 digits using the formal written methods for addition and subtraction where appropriate.</li> <li>➤ Estimate and use the inverse operations to check the answer to a calculation.</li> <li>➤ Solve addition and subtraction two step problems in contexts (focus on measures particularly length, capacity, weight) deciding on which operation and method to use and why.</li> </ul>			<p><b>Number and Place Value</b></p> <ul style="list-style-type: none"> <li>➤ Round any number up to 10,000 to the nearest 10,100 or 10000</li> </ul>		<p><b>Half term</b></p>	<p><b>Measurement: Length and Perimeter</b></p> <ul style="list-style-type: none"> <li>➤ Measure the perimeter of simple 2-D shapes</li> <li>➤ Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and M.</li> <li>➤ Find the area of rectilinear shapes by counting squares</li> <li>➤ Understand the equivalence between different units of measurement for length including M to cm and cm to mm and vice versa</li> <li>➤ Convert kilometres into metres and vice versa using real life contexts.</li> </ul>		<p><b>Multiplication and division</b></p> <ul style="list-style-type: none"> <li>➤ Use place value, known and derived facts to multiply and divide mentally, including:</li> <li>➤ Pupils use multiplication and division facts to derive related facts e.g. <math>3 \times 2 = 6</math>, <math>30 \times 2 = 60</math> extending this to 3 digit numbers e.g. <math>2 \times 300 = 600</math> and understanding the relationship between multiplication and division facts e.g. <math>600 / 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>. multiplying by 0 and 1; dividing by 1;</li> <li>➤ multiplying together three numbers – use commutativity here e.g. <math>4 \times 12 \times 5</math> becomes <math>4 \times 5 = 20 \times 12</math> and then becomes <math>20 \times 12</math>.</li> <li>➤ recognise and use factor pairs and commutativity in mental calculations</li> <li>➤ Use the distributive law for mental calculations.</li> <li>➤ Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit (if time)</li> </ul>			<p><b>Geometry Properties of Shape</b></p> <ul style="list-style-type: none"> <li>➤ Describe the properties of 2D and 3D shapes using accurate terminology.</li> <li>➤ Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.</li> <li>➤ Identify horizontal lines and vertical lines and pairs of perpendicular and parallel lines.</li> <li>➤ Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>➤ Identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>➤ Identify symmetrical and non-symmetrical polygons.</li> <li>➤ Identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>➤ Complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul>		

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Spring Term																	
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6				
Wed 5 <sup>th</sup> – 9 <sup>th</sup> Jan	10 <sup>th</sup> – 16 <sup>th</sup> Jan	17 <sup>th</sup> – 23 <sup>rd</sup> Jan	7 <sup>th</sup> Feb – 13 <sup>th</sup> Feb	31 <sup>st</sup> – 6 <sup>th</sup> Feb	7 <sup>th</sup> Feb – 13 <sup>th</sup> Feb	14 <sup>th</sup> – 20 <sup>th</sup> Feb	21 <sup>st</sup> – 27 <sup>th</sup> Feb	28 <sup>th</sup> Feb – 6 <sup>th</sup> March	7 <sup>th</sup> – 13 <sup>th</sup> March	14 <sup>th</sup> – 20 <sup>th</sup> March	21 <sup>st</sup> – 27 <sup>th</sup> March	28 <sup>th</sup> – 3 <sup>rd</sup> April	4 <sup>th</sup> – 10 <sup>th</sup> April				
<p><b>Multiplication and division</b></p> <p>(Written methods)</p> <ul style="list-style-type: none"> <li>➤ Multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>➤ Solve problems involving integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> <li>➤ Use informal written methods for division (number lines or jottings), for example, using known facts to divide 63/3.</li> <li>➤ Solve problems involving all four operations including different surface, same problem questions.</li> </ul>			<p><b>Number: Fractions</b></p> <ul style="list-style-type: none"> <li>➤ Count up and down in halves and <math>\frac{2}{4}</math> and other basic fractions verbally.</li> <li>➤ Compare and order unit fractions and fractions with the same denominator.</li> <li>➤ Add and subtract fractions with the same denominator within one whole using practical resources and diagrams to represent this. (Ensure understanding – why do we not add the denominator?)</li> <li>➤ Add and subtract fractions with the same denominator going over one whole (using simple fractions) e.g. <math>2\frac{1}{2} + 3\frac{1}{2}</math>; <math>\frac{3}{4} + \frac{2}{4}</math></li> <li>➤ Recognise and show using diagrams, equivalent fractions with small denominators, e.g. <math>\frac{1}{2} = \frac{2}{4}</math>, <math>\frac{1}{3} = \frac{2}{6}</math> etc.</li> <li>➤ Recognise and show using diagrams, families of common equivalent fractions e.g. <math>\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}</math>; <math>\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}</math>; including simple non-unit fractions <math>\frac{3}{4} = \frac{6}{8} = \frac{9}{12}</math></li> <li>➤ Recognise and use fractions as numbers: Use the bar model and introduce more efficient methods of calculating non-unit fractions e.g. <math>\frac{3}{5}</math> of 30 = <math>30 \div 5 = 6 \times 3 = 18</math></li> <li>➤ Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities where the answer is a whole number</li> </ul>					<p><b>Years 3 – 5 assessment week</b></p> <hr/> <p><b>Measurement: Area</b></p> <ul style="list-style-type: none"> <li>➤ Find the area of rectilinear shapes by counting squares</li> </ul>		Half term	<p><b>Fractions – Decimal numbers</b></p> <ul style="list-style-type: none"> <li>➤ Recognise tenths and hundredths and begin to understand the equivalence between tenths and hundredths.</li> <li>➤ Count up and down in tenths; recognise that tenths arise from splitting an object into ten equal parts.</li> <li>➤ Identify Tenths as decimals</li> <li>➤ Understand the place value of tenths including how many tenths in numbers larger than one-whole, for example 3.2 = 3 wholes (30/10) and 2/10's.) Place tenths using place value charts and number lines.</li> <li>➤ Divide 1 digit numbers by 10, for example, <math>4 / 10 = 0.4</math></li> <li>➤ Divide 2 digit numbers by 10, for example: <math>35 / 10 = 3.5</math></li> <li>➤ Recognise that hundredths arise from dividing a number into 100 equal parts and understand equivalence between tenths and hundredths.</li> <li>➤ Identify hundredths as decimal numbers.</li> <li>➤ Understand the place value of hundredths using place value grids.</li> <li>➤ Divide 1 and 2 digit numbers by 100, for example <math>4/100 = 0.04</math> and <math>72/100 = 0.72</math></li> </ul>			<p><b>Number and Place Value</b></p> <ul style="list-style-type: none"> <li>➤ Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li> </ul> <p><b>When finished move onto time.</b></p>		<p><b>Measurement: Time</b></p> <ul style="list-style-type: none"> <li>➤ Tell and write the time from an analogue clock, including clocks with Roman numerals with increasing accuracy to the <b>nearest minute</b>.</li> <li>➤ Record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/ pm, morning afternoon, noon and midnight.</li> <li>➤ Know the number of seconds in a minute, number of days in each month and days in a year/ leap year.</li> <li>➤ Convert between different units of measure, for example hours to minutes.</li> <li>➤ compare durations of events [for example to calculate the time taken by particular events or tasks].</li> <li>➤ Read, write and convert time between analogue and digital 12 and 24 hour clocks.</li> <li>➤ Solve problems converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>	

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Summer Term																							
Week 1	Week 2	Week 3	Week 4	Week 5		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7											
25 <sup>th</sup> April – 1 <sup>st</sup> May	3 <sup>rd</sup> – 8 <sup>th</sup> May	9 <sup>th</sup> - 15 <sup>th</sup> May	16 <sup>th</sup> – 22 <sup>nd</sup> May	23 <sup>rd</sup> – 29 <sup>th</sup> May	30 <sup>th</sup> May – 5 <sup>th</sup> June	6 <sup>th</sup> – 12 <sup>th</sup> June	13 <sup>th</sup> – 19 <sup>th</sup> June	20 <sup>st</sup> – 26 <sup>th</sup> June	27 <sup>th</sup> – 3 <sup>rd</sup> July	4 <sup>th</sup> – 10 <sup>th</sup> July	11 <sup>th</sup> – 17 <sup>th</sup> July	18 <sup>th</sup> – 24 <sup>th</sup> July											
<p><b>Number: Decimals</b></p> <ul style="list-style-type: none"> <li>➤ Understand that decimal numbers (tenths and hundredths) can be combined to make a whole.</li> <li>➤ Understand the place value of numbers with up to 2 decimal places. For example <u>25.03</u> value of the 2 is 20. Partition numbers.</li> <li>➤ Compare single and two whole digit numbers with up to 2 decimal places. E.g. 35.81</li> <li>➤ Order numbers with 2 decimal places.</li> <li>➤ Round decimals with one decimal place to the nearest whole number.</li> <li>➤ Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> <li>➤ Solve number and practical problems that involve all of the above with increasingly large positive numbers up to 10,000 including numbers with up to 2 decimal places.</li> </ul>			<p><b>Measurement: Money</b></p> <ul style="list-style-type: none"> <li>➤ <b>add and subtract amounts of money to give change, using both £ and p in practical contexts recording £ and p separately.</b></li> <li>➤ Understand £ and pence and the decimal notation for money.</li> <li>➤ Compare and order quantities and amounts of money shown in £ and pence (decimal notation)</li> <li>➤ Estimate using money including pounds and pence. (decimal notation)</li> </ul> <p>Solve problems using all four operations and money.</p>			<p><b>Number and Place Value</b></p> <ul style="list-style-type: none"> <li>➤ Count backwards through zero to include negative numbers.</li> </ul>			<p>Half term</p>			<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>➤ Interpret and present data using bar charts, pictograms and tables.</li> <li>➤ Pupils understand scales of 2,5, and 10 with increasing accuracy.</li> <li>➤ Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.</li> <li>➤ Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. (Large time graph focus in year 5)</li> <li>➤ Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul>			<p><b>Assessment Week</b></p>		<p><b>Continue with statistics as needed.</b></p>		<p><b>Geometry: position and direction</b></p> <ul style="list-style-type: none"> <li>➤ Pupils should be taught to: Describe positions on a 2-D grid as coordinates in the first quadrant.</li> <li>➤ Describe movements between positions as translations of a given unit to the left/right and up/down.</li> <li>➤ Plot specified points and draw sides to complete a given polygon.</li> </ul>			<p><b>Consolidate year 4 objectives as needed so that pupils are year 5 ready.</b></p>	

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